

“ Yet its lustre to the naked eye remains what it used to be; at least, as well as I can remember it, it seems unchanged. This allows me to suspect that the real discs of the two stars are clear of each other, and that no total or partial eclipse has occurred. With a view, however, to settle this question on the recess of the stars, which can hardly be delayed more than a year, I have made the following comparisons with neighbouring stars favourably situated; viz.

γ Virginis is now	less than β or γ Corvi.
—	equal to δ Corvi.
—	greater than ϵ Corvi.

These comparisons will of course be renewed from time to time.

“ It may not be irrelevant to mention that I strongly suspect the beautiful and delicate double star τ *Lupi* to be undergoing the same critical change. At least, I cannot help considering it now a much more intractable object than when I first discovered it to be unequivocally double. Indeed, a few evenings ago, during a time of tolerably good definition, I had the utmost difficulty in perceiving any elongation whatever, whereas I used to consider it as of the order ‘*Vicinæ*,’ or at the utmost ‘*Pervicinæ*,’ of Struve.

“ Halley’s Comet continues in a very favourable state for observation, and I hope to follow it at least another month,* though the ensuing full moon will most probably put a final end to the pursuit.”

II. Observations of Halley’s Comet, made at Bedford. By Capt. W. H. Smyth, R. N.

The result of this paper is fifty places of the comet, on eighteen different days, from August 24 to October 21, 1835. With the exception of three meridian observations, and four with a double-wire micrometer, the whole of the observations were made with an annular micrometer, presented to Capt. Smyth by Mr. Baily. The motion of the comet was taken into account in a formula furnished by Mr. Epps, of which an investigation and example is given. The original observations, the positions of the stars of comparison (comet-pointers), and finally the places of the comet, are tabulated. It was first seen on the 24th of August, as “ a nebulous blot of indistinct form and misty appearance:” on the 28th, the nucleus was visible, and very distinct on the 31st. On the 9th and 10th of October, an appearance of a luminous brush or fan accompanied the nucleus, being not unlike that exhibited in a drawing of Hevelius (*Annus Climactericus*) which represents an appearance of this same comet in 1682, and a copy of which will appear with the paper in the Memoirs. Captain Smyth has given several representations of the comet’s appearance, which, though rough, are of a striking character, formed

* In a subsequent letter to Captain Smyth, Sir J. Herschel says, “ I pursued the comet till the 5th of May. From that time to the 11th no observation could be got, and I was deprived of all chance of pursuing it further by an impostor — a nebula, undescribed in my catalogue, under g *Sextantis*, just where I expected to have seen the comet, and looking just as I expected it to look. Next night, on setting a sweep to pass over the place, there stood the nebula unmoved, but the real comet was nowhere to be found.”

by laying down a dark field of ink, from which the light parts were then erased with a pen-knife. Upon a suggestion of Mr. Basire, the engraver, the same process has been copied on the lithographic stone: and the result is worth the attention of astronomers (as will appear in the Memoirs) in all cases in which the general features of a light upon a dark ground are required to be represented, at a less expense than that of copper-plate.

III. Observations of the Solar Eclipse, May 15, 1836, by various Observers.

Note.—The letter *m* signifies mean solar time, and *s* sidereal time.

Place.		Time.	Observer.	Instrument.	Remarks.
Aberdeen (Marischal College)	{	h m s Begin. 1 38 41, m End 4 22 58, m	Dr. Cruickshank	3½-feet achrom.	"Certain to 1 sec."
Altona	{	Begin. 2 43 50,8 m End 5 21 23,2 m	Prof. Schumacher		
Armagh (Observatory)	{	Begin. 1 14 4,58 m Ann. { B. 2 42 24,04 m E. 2 42 45,98 m End 4 4 58,88 m	Dr. Robinson	Achr. 2½ ap., pr. 60.	"Luminous cusps connected." "Luminous cusps disconnected." "But the point of ultimate contact is a high mountain."
Ashurst (Mr. Snow's Ob.)	{	Begin. 5 23 23,8 s End 8 11 50,8 s	Mr. Snow	"Uncertain to 10 sec., but not more."
Bedford (Capt. Smyth's Ob.)	{	Begin. 5 21 47,7 s End 8 10 10,8 s	Capt. Smyth	8½-ft. achr. pr. 110.	"Slight undulating impression." "Certain to 1 sec."
Blackheath (Mr. Wrottesley's Observatory)	{	Begin. 5 25 15,26 s 5 24 59,44 s End 8 12 57,05 s 8 12 58,24 s	Mr. Wrottesley Mr. Hartnup Mr. Wrottesley Mr. Hartnup		
Cambridge (Observatory)	{	Begin. 5 24 57,93 s End 8 12 38,34 s 8 12 40,10 s	Mr. Airy Professor Challis		
Edinburgh (Observatory)	{	Begin. 1 33 10, m Ann. { B. 2 57 20,9 m E. 3 1 3,3 m End 4 13 21,6 m	Mr. Galbraith Prof. Henderson	49-in. achr., pr. 50. 51-in. achr., pr. 68.	"Doubtful 2 or 3 sec."
Falmouth	{	Begin. 1 23 7, m End 4 15 57, m	J. R. Andrews, R.N.	"Doubtful 1 or 2 sec."
Greenwich (Royal Observatory)	{	Begin. End 8 12 53,83 s 8 12 54,33 s 8 12 57,65 s 8 12 58,15 s 8 12 56,90 s Five Observers	"Lost by clouds." "Every thing very favourable."
Greenwich (Royal Hospital)	{	Begin. 1 51 28, m End 4 39 8, m	Mr. Riddle		
Greenwich (Royal Nav. Asyl.)	{	Begin. 1 51 34, m End 4 39 8, m	Rev. Mr. Fisher	46-in. achr., pr. 70.	"Limbs exceedingly clear and well defined."
Hampstead (Mr. Holford's)	{	Begin. 5 23 47, s End 8 11 50, s	Mr. Holford	5-feet equatorial	
Hartwell (Dr. Lee's Observ.)	{	Begin. 5 19 45,5 s End 8 8 42,7 s 8 8 42,2 s	Mr. Epps Dr. Lee	30-in. achr., pr. 60. 5-feet achr., pr. 45.	"First disturbance of sun's well-defined limb." "Certain within 1 sec."